

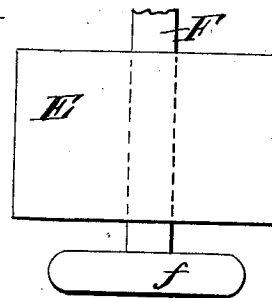
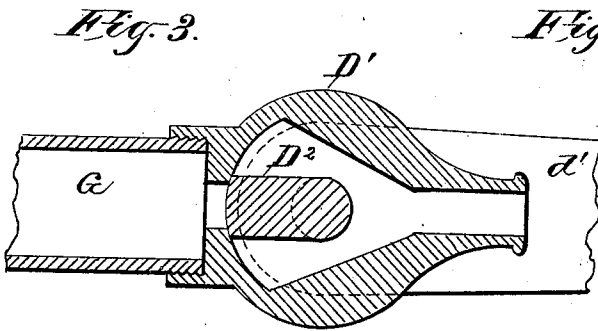
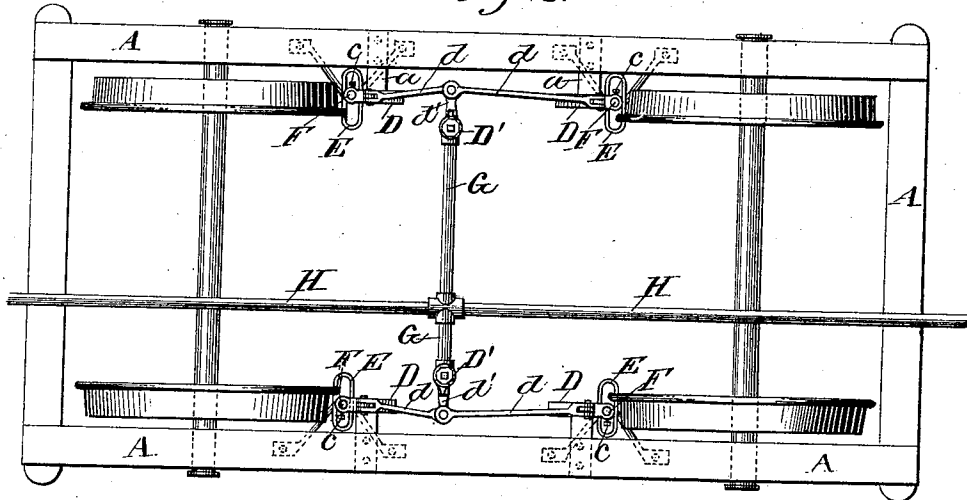
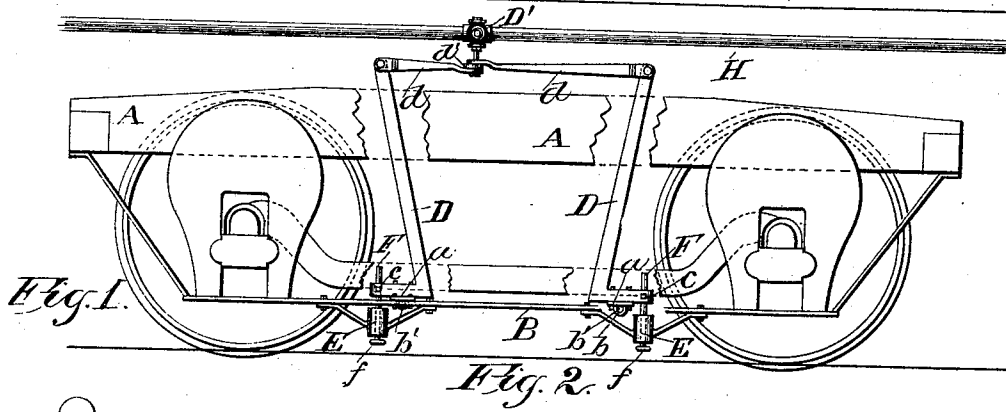
(No Model.)

E. A. WESCOTT & E. R. BRISTOL.

CAR BRAKE.

No. 321,070.

Patented June 30, 1885.



Witnesses:

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UNITED STATES PATENT OFFICE.

EARL A. WESCOTT AND EDMUND R. BRISTOL, OF MINNEAPOLIS, MINNESOTA.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 321,070, dated June 30, 1885.

Application filed January 28, 1885. (No model.)

To all whom it may concern:

Be it known that we, EARL A. WESCOTT and EDMUND R. BRISTOL, both of Minneapolis, in the county of Hennepin, and in the State of Minnesota, have invented certain new and useful Improvements in Car-Brakes; and we do hereby declare that the following is a full, clear, and exact description thereof.

Our invention relates to railroad car and engine brakes; and it consists in certain attachments to the well-known atmospheric-brake system, wherein the brakes are applied by a diminution of the air-pressure in the main supply-pipe.

The nature of our invention will be fully set forth hereinafter.

In the drawings, Figure 1 is a side view of a truck with our invention in position thereon. Fig. 2 is a plan view of the same, and Figs. 3 and 4 are details.

A is the truck-frame, and B are the pedestal-braces.

a are brackets that are projected inwardly from the sides of the braces, and each carries a round stud, b, that fits in a bearing, b', on the under side of the short arm of a lever, D, and forms the fulcrum for it to turn upon.

E are guides that are suspended to the under side of the pedestal-braces for the reception each of a post, F, that is passed up through it into an opening in the end of the short arm of the lever D, where it is secured by a set-screw, c. The long arm of each lever D projects up above the truck-frame, and is connected by a link, d, with the handle d' of a cock, D', that terminates a tube, G, that is coupled to the main supply-pipe H. There are a pair of levers, D, between each pair of wheels, and the posts F are suspended directly over the rails.

The operation of our device is as follows: Should one or more of the wheels jump the track, the rail will come in contact with a post, F, (which may have a foot or shoe, f, as shown,) and will lift it and cause it to lift the end of the short arm of a lever, D, and thrust its long arm backward, causing it in turn to throw the handle d' out of line with the tube G and open the valve D², which will allow

the air in the supply-pipe to escape and set the brakes.

We have not deemed it necessary to show any more of the atmospheric-air-brake system than merely the supply-pipe, as it is well known by all those skilled in this art that the brakes are set by means of a reservoir and what is known as a "triple valve," which latter is held in its seat by the pressure in the reservoir and main supply-pipe being held in equilibrium, and that a decrease of pressure from the supply-pipe will permit the pressure of the air in the reservoir to force the valve from its seat and admit the air from the reservoir to the cylinder in which the brake-piston is located. Any break in the pipe H will do this, and therefore we have provided this method of causing the automatic application of the brakes in case of accident, for as soon as one wheel leaves the rail the post or foot must strike the rail, and this causes a lever, D, to open valve D², which immediately sets the brakes on all the cars, and thus stops the train.

The breaking of an axle would produce the same result, or the contact of any obstruction with the lower end of the post or foot would apply the brakes. The posts F are each, as stated, preferably formed with a foot, f, which gives it sufficient surface to insure its striking the rail in case of accident.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the supply-pipe of an atmospheric-brake system, of a suspended post and a lever connecting it with a valve of the supply-pipe.

2. A post suspended from the truck of a railway-car or engine-truck over the rail, in combination with the supply-pipe of an atmospheric brake, a valve leading to the supply-pipe, and mechanism connecting the post with said valve, whereby the lifting of the post by contact with the rail or other obstruction will open the valve and apply the brakes, substantially as set forth.

3. The combination, with the supply-pipe of an atmospheric-brake system, of a valve lead-

ing therefrom, a link, *d*, lever D, and a post suspended from the short arm of lever D over the rail, as and for the purpose set forth.

4. The combination, with the pipe H, of tubes G and their valves, levers D, links *d*, posts F, and guides E, as and for the purpose set forth.

In testimony that we claim the foregoing we

have hereunto set our hands, at Minneapolis, in the county of Hennepin and State of Minnesota, in the presence of two witnesses.

EARL A. WESCOTT.

EDMUND R. BRISTOL.

Witnesses:

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